

AMENDMENTS TO THE CLAIMS

The listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1-6.: canceled.

7. (Currently amended) An attenuated *Pasteurellaceae* bacteria comprising a mutation in the protein coding region of an *atpG* gene as set forth in SEQ ID NO: 3 or a species homolog thereof a nucleotide sequence that encodes an *atpG* polypeptide comprising an amino acid sequence at least 70% identical to the *atpG* amino acid sequence of SEQ ID NO:4, said mutation resulting in decreased *atpG* biological activity, wherein the decreased *atpG* biological activity attenuates the *Pasteurellaceae* bacteria.

8. (Currently amended) The *Pasteurellaceae* bacteria of claim 7 wherein the decreased *atpG* biological activity is decreased due to the mutation resulting in decreased *atpG* ~~gene product~~ polypeptide expression.

9. (Currently amended) The *Pasteurellaceae* bacteria of claim 7 wherein said mutation results in expression of an inactive *atpG* ~~gene product encoded by the mutated *atpG* protein coding region~~ polypeptide.

10. (Currently amended) The *Pasteurellaceae* bacteria of claim 7 wherein said mutation results in deletion of all or part of said *atpG* ~~gene~~ nucleotide sequence that encodes an *atpG* polypeptide.

11. (Currently amended) The *Pasteurellaceae* bacteria of claim 7 wherein said mutation results in deletion of at least about 10%, ~~at least about 20%, at least about 30%, at least about 40% at least about 50%, at least about 60%, at least about 70%, at least about 80%, at least about 90%, at least about 95%, at least about 98%, or at least about 99%~~ of said *atpG* ~~gene~~ nucleotide sequence that encodes an *atpG* polypeptide.

12. (Currently amended) The *Pasteurellaceae* bacteria of claim 7 wherein said mutation results in an insertion in the *atpG* ~~gene~~ nucleotide sequence, said insertion causing decreased expression of an ~~the *atpG* gene product~~ polypeptide encoded thereby ~~by the mutated *atpG* protein coding region and/or expression of an inactive *atpG* gene product~~ polypeptide encoded thereby ~~by the mutated *atpG* protein coding region~~.

13. (Original) The *Pasteurellaceae* bacteria of claim 7 selected from the group consisting of *Pasteurella haemolytica*, *Pasteurella multocida*, *Actinobacillus pleuropneumoniae* and *Haemophilus somnus*.

14. (Currently amended) The *Pasteurellaceae* bacteria of claim 13 wherein the decreased atpG biological activity is due to the mutation resulting in decreased atpG ~~gene product~~ polypeptide expression.

15. (Currently amended) The *Pasteurellaceae* bacteria of claim 13 wherein said mutation results in expression of an inactive atpG ~~gene product encoded by the mutated atpG protein coding region~~ polypeptide.

16. (Currently amended) The *Pasteurellaceae* bacteria of claim 13 wherein said mutation results in deletion of all or part of said atpG ~~gene~~ nucleotide sequence that encodes an atpG polypeptide.

17. (Currently amended) The *Pasteurellaceae* bacteria of claim 13 wherein said mutation results in deletion of at least about 10%, ~~at least about 20%, at least about 30%, at least about 40% at least about 50%, at least about 60%, at least about 70%, at least about 80%, at least about 90%, at least about 95%, at least about 98%, or at least about 99%~~ of said atpG ~~gene~~ nucleotide sequence that encodes an atpG polypeptide.

18. (Currently amended) The *Pasteurellaceae* bacteria of claim 13 wherein said mutation results in an insertion in the atpG ~~gene~~ nucleotide sequence, said insertion causing decreased expression of ~~an the atpG gene product polypeptide encoded thereby by the mutated atpG protein coding region and/or expression of an inactive atpG gene product polypeptide encoded thereby by the mutated atpG protein coding region~~.

19. (Original) The attenuated *Pasteurellaceae* bacteria of claim 13 that is a *P. multocida* bacteria.

20. (Currently amended) The *Pasteurellaceae* bacteria of claim 19 wherein the decreased atpG biological activity is decreased due to the mutation resulting in decreased atpG ~~gene product~~ polypeptide expression.

21. (Currently amended) The *Pasteurellaceae* bacteria of claim 19 wherein said mutation results in expression of an inactive atpG ~~gene product encoded by the mutated atpG protein coding region~~ polypeptide.

22. (Currently amended) The *Pasteurellaceae* bacteria of claim 19 wherein said mutation results in deletion of all or part of said ~~atpG gene~~ nucleotide sequence that encodes an atpG polypeptide.

23. (Currently amended) The *Pasteurellaceae* bacteria of claim 19 wherein said mutation results in deletion of at least ~~about 10%, at least about 20%, at least about 30%, at least about 40% at least about 50%, at least about 60%, at least about 70%, at least about 80%, at least about 90%, at least about 95%, at least about 98%, or at least about 99%~~ of said ~~atpG gene~~ nucleotide sequence that encodes an atpG polypeptide.

24. (Currently amended) The *Pasteurellaceae* bacteria of claim 19 wherein said mutation results in an insertion in the ~~gene~~ nucleotide sequence, said insertion causing decreased expression of ~~an the atpG gene product polypeptide encoded thereby by the mutated atpG protein coding region and/or expression of an inactive atpG gene product polypeptide encoded thereby by the mutated atpG protein coding region~~.

25-30. (Canceled)

31. (Previously presented) An immunogenic composition comprising the bacteria according to any one of claims 7-24.

32-51. (Canceled)